



QUALITY OF CARE AND OUTCOMES ASSESSMENT

PERCEIVED STRESS AND LONG-TERM MORTALITY AFTER ACUTE MYOCARDIAL INFARCTION

ACC Poster Contributions

Ernest N. Morial Convention Center, Hall F

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Background: Chronic stress is an important risk factor for the development of cardiovascular disease and death in population studies. However, little is known about the association of chronic stress with adverse outcomes after acute myocardial infarction (AMI).

Methods: In a cohort of 4204 AMI patients from 24 US hospitals completing the Perceived Stress Scale-4 during hospitalization, we defined moderate/high stress over the prior month as being in the top 2 quintiles (stress scores = 6-16). Multivariable logistic regression identified sociodemographic and clinical factors associated with moderate/high stress levels. Cox proportional hazards model evaluated the independent association between moderate/high stress and 2 year mortality.

Results: Moderate/high stress (n=1622) was associated with younger age, female, less education, low social support, avoiding medical care due to cost, depressive symptoms, anemia and hypertension ($p<0.05$ for all). MI patients with moderate/high stress had increased 2 year mortality (12.9% vs. 8.6%; $p<0.001$). After adjusting for sociodemographic and clinical factors, including depressive symptoms and GRACE discharge score, moderate/high stress remained associated with increased 2 year mortality (HR 1.46, 95% CI 1.14-1.86).

Conclusion: AMI Patients with moderate/high stress have an increased 2 year risk of dying, even after adjustment for confounding factors. Developing interventions to treat chronic stress may potentially improve outcomes after AMI.

Kaplan-Meier estimated 2-year mortality by level of perceived stress during hospitalization for AMI

